## PATENT SPECIFICATION

DRAWINGS ATTACHED

1088,654



Date of filing Complete Specification April 14, 1966.

Application Date: May 7, 1965.

No. 19263/65.

Complete Specification Published: Oct. 25, 1967.

© Crown Copyright 1967.

-B4 W(5F, 5NX); A3 V(1A1X, 7B4); A5 R40X11; B5 D2B1; B8 C(15A, 15D, Index at acceptance: 20); B8 K(2K1, 2K2)

Int. Cl.: -B 25 b 9/02

## COMPLETE SPECIFICATION

## Disposable Tongs

I, Stephen Arthur Jones, British Subject, of "Peaceavon" Wyre, near Pershore, Worcestershire, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—
This invention relates to disposable tongs

which are more particularly intended for use 10 in handling unwrapped food, for example, in shops, although the said tongs may if desired be used in suitable other cases where it is desired to avoid touching substances or articles to be picked up by hand.

A common method of handling food in an unwrapped condition in shops is to use metal tongs, which may be used a considerable number of times, in the course of a day's trading, between cleanings. This is a disadvantage 20 from a hygienic point of view, particularly as in the course of such use the food-gripping surfaces of the tongs may inadvertently be handled or soiled.

An object of the present invention is to provide tongs, suitable for use in handling food, which can be produced at a cost sufficiently low to make it practicable for the user to throw them away after use once only, and which are packaged in such a way that they can readily be withdrawn for use without the user's hands coming into contact with those surfaces of the tongs which are to engage the substance or article to be picked up.

According to the invention, a plurality of 35 disposable tongs are housed in a box-like dispenser and are each formed by a respective strip of paper, or other flexible disposable material, provided at each end with a pocket and folded about its middle so that its pocketed ends form jaws and so that each pocket is at the outside of the tongs, said plurality of tongs being positioned in nestedtogether relationship over an edge of a par-

tition of the dispenser, whereby the opposed jaws of each of the tongs are respectively disposed at opposite sides of the partition, with the mouths of the pockets presented towards a mouth of the dispenser, the arrangement being such that the user can insert a finger, or fingers, and a thumb into respective pockets and withdraw the tongs, one at a time, from the dispenser without having to touch the surfaces of the tongs which are to come into contact with the substance or article to be picked up.

A convenient embodiment of the invention is illustrated, by way of example, in the accompanying drawings, in which:

Figure 1 shows disposable tongs;

Figure 2 is a vertical section through the tongs shown in Figure 1, the thickness of the material being exaggerated in this view, for the sake of clarity;

Figure 3 shows, in diagrammatic vertical section, a dispenser housing a plurality of tongs each of the construction shown in Figures 1 and 2; and

Figures 4(a) to 4(d) illustrate stages in the formation of tongs, of the construction shown in Figures 1 and 2, from a web of

disposable material.

Referring to Figures 1 and 2 of the drawings, disposable tongs 1 more particularly intended for use in handling unwrapped food in shops and the like are formed by a strip of paper 2 provided at each end with a pocket 3. Each pocket 3 has a front wall 4 which constitutes a folded-over extension of the respective end of the strip 2 and which is secured at the sides, at 5, by a band of suitable adhesive, to adjacent marginal portions of the strip 2. The strip 2 is folded at 6 about its middle, so that the pocketed ends of the strip form jaws of the tongs, each pocket 3 being at the outside of the tong and having its mouth, shown at 3a, upwardly presented

55

towards the middle of the strip 2. The arrangement is such that the tongs 1 can be held in use by the user inserting a finger or fingers into the one pocket 3 and a thumb into the other pocket 3. On pressing together the said fingers and thumb, or finger and thumb, inserted in the respective pockets 3, gripping pressure can thereby be applied through the tongs to the substance or article 10 picked up.

The bands of adhesive, securing the sides of the front wall 4 of each pocket to the strip 2, stop short of the top edge portion 4a of the wall 4, so as that said portion 4a 15 forms a flap facilitating insertion of the finger, or fingers, or thumb, into the respective pocket

Referring to Figure 3, a plurality of tongs 1 each constructed as described in the last preceding paragraphs are packaged in a particularly convenient manner by housing them, in a nested-together relationship in a dispenser 7 of a rectangular box-like form having a central vertical partition 8 which stops short of the top of the dispenser, the said tongs 1 being positioned over a top edge 8a of said partition whereby the opposed jaws of each of the tongs 1 depend at opposite sides of the partition 8, with the mouths of the pockets presented upwards. This arrangement is such that it enables the user to insert, through a top mouth 9 of the dispenser, a plurality of fingers, and a thumb or a finger and thumb, into the respective pockets of the topmost of the tongs 1 and the user can readily withdraw said topmost tongs without having to touch the inner surfaces of the ends of the tongs, that is, without having to touch those surface portions of the tongs which come into contact with the substance or article to be picked up, thereby enabling the substance or article to be handled in a hygienic manner and safeguarded against contamination by contact with the hand of the user. After being used once, 45 the said tongs can be thrown away, and the next tongs (now the topmost tongs) in the dispenser 7 can be withdrawn from the latter, in the same way as with the first tongs, when required for use. The operation can be continued, withdrawing the tongs 1 one at a time, as long as tongs remain in the dispenser.

The ends of the strip, which form the outer ends of the jaws of the tongs, are shown with right-angled corners but may be of any other suitable shape. They may, for example, be of a rounded or a pointed shape, or have

bevelled corners

Referring to Figures 4(a) to 4(d), the tongs may be made in quantity from a paper web A by first folding over said web A longitudinally at opposite sides along fold lines B (Figure 4(a)) to provide a pair of marginal portions C (Figure 4(b)) each overlapping a part of the central portion of the web, next securing these marginal portions C, to the parts they overlap, by bands of adhesive D (Figure 4(c)) extending transversely of the web and spaced apart in the longitudinal direction of the web, next cutting the web transversely to divide the web into a plurality of pocketer strips (Figure 4(d)), and then folding each strip about its middle to form the tongs.

If desired, the tongs may be made from a suitable flexible disposable plastics material, instead of from paper, and the pockets of such plastics strips may be secured at their side edges by heat-sealing, instead of by adhesive.

The invention thus provides simple means for use in connection with the handling of food hygienically, and a further advantage is that there is less likelihood of delicate foodstuffs, such as cream cakes or pastries, being accidentally crushed when being picked up by the tongs, than would be the case if conven- 85 tional metal tongs were used.

Whilst it is preferred that the pocket width is such that in use, with a thumb inserted into the one pocket, more than one finger can be inserted in the other pocket, if desired the pocket width may be such as to permit only one finger to be inserted in the pocket not

occupied by the thumb.

If desired, tongs constructed and packaged in accordance with the invention may be used in hospitals in connection with handling of hospital instruments and utensils, and toilet paper.

WHAT I CLAIM IS:—

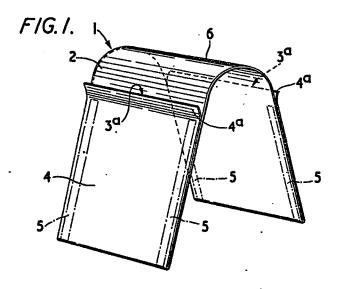
1. A plurality of disposable tongs which 100 are housed in a box-like dispenser and which are each formed by a respective strip of paper, or other flexible disposable material, provided at each end with a pocket and folded about its middle so that its pocketed ends 105 form jaws and so that each pocket is at the outside of the tongs, said plurality of tongs being positioned in nested-together relationship over an edge of a partition of the dispenser, whereby the opposed jaws of each of 110 the tongs are respectively disposed at opposite sides of the partition, with the mouths of the pockets presented towards a mouth of the dispenser, the arrangement being such that the user can insert a finger, or fingers, and a 115 thumb into respective pockets and withdraw the tongs, one at a time, from the dispenser without having to touch the surfaces of the tongs which are to come onto contact with the substance or article to be picked up.

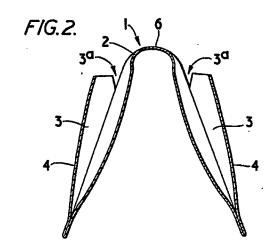
2. A dispenser housing a plurality of dis-

posable tongs, substantially as herein described with reference to the accompanying drawings.

H. N. & W. S. SKERRETT, 24, Temple Row, Birmingham, 2, Agents for the Applicants.

Learnington Spa: Printed for Her Majesty's Stationery Office by the Courier Press.—1967
Published at The Patent Office, 25, Southampton Buildings, London, W.C.2, from which copies may be obtained.

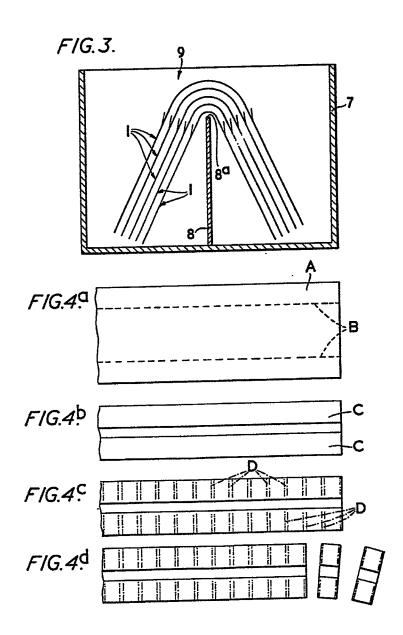




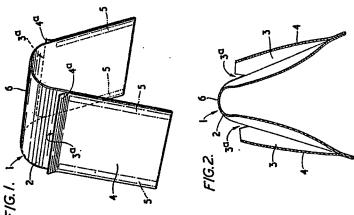
1088654 COMPLETE SPECIFICATION

2 SHEETS This drawing is a reproduction of the Original on a reduced scale

Sheets 1 & 2



F/G.3. F/6.4d F/6.4º F/G.4b ( F16.49



F/G.1. 1

1000